SECTION II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Preventive Maintenance Checks and Services (PMCS) will ensure that the MILES 2000 equipment will be ready for operation and perform satisfactorily throughout its mission. Preventive maintenance checks consist of performing a systematic inspection to discover defects before they result in operational failure of the equipment. Defects or malfunctions discovered by the crew during use of the MILES 2000 equipment, or as a result of performing maintenance checks and services, will be reported using the proper forms.

2.2 INTRODUCTION TO PMCS TABLE.

Operator Preventive Maintenance Checks and Services are shown in Table 2-2. Tasks to be performed before operation are checked in the "B" column under the heading "Interval;" tasks to be performed during operation are checked in the "D" column; tasks to be performed after operation are checked in the "A" column; tasks to be performed weekly are checked in the "W" column, and tasks to be performed monthly are checked in the "M" column. If no check marks are in the monthly or weekly column, perform PMCS procedures daily.

NOTE

Within designated intervals, these checks are to be performed in the order listed.

B - Before Operation
D - During Operation
A - After Operation
W - Weekly
M - Monthly

Table 2-2. Operator Preventive Maintenance Checks and Services

ITEM NO.	ITEM TO BE INSPECTED	INTERVAL B	D	A	W	M	PROCEDURES CHECK FOR AND HAVE REPAIRED	EQUIPMENT IS NOT READY/AVAILABLE IF:
1.	Individual Weapons Systems (IWS) Console (DPCU)	√		√			Insect for cracks in display window and membrane switches.	Display window or membrane switch broken or cracked.
		√	√	√			Check for display in display window when battery installed.	No display in display window.
							Check for battery in unit (if applicable).	Battery not present (if applicable).
2.	IWS	√					Wipe all detectors clean. Inspect harness for damage that would prevent normal operation.	Detectors broken or missing. Amplifier cracked, broken, or missing.
3.	Control Unit (CU)	√		√			Inspect for cracks in display window and membrane switches.	Display window or membrane switch broken.
		√	√				Check for display in display window when powered on.	No display in display window when powered on.
4.	Kill Status Indicator (KSI)	√		√			Inspect for cracks in amber dome plastic lens of visual strobe.	Amber dome plastic lens cracked.
		√		√			Check for optical port damage.	Lens broken, cracked or missing.
5.	Coax Microphone	√		√			Inspect microphone for obvious damage. Make sure clip is securely attached.	Cracked or broken casing. Clip loose or missing.
		√	√				Wipe connector clean and inspect for damage.	Broken connector. Bent or missing pins.

Table 2-2. Operator Preventive Maintenance Checks and Services - Continued.

ITEM NO.	ITEM TO BE INSPECTED	INTERVAL B	D	A	W	M	PROCEDURES CHECK FOR AND HAVE REPAIRED	EQUIPMENT IS NOT READY/AVAILABLE IF:
5.	Coax Microphone (Continued)	√		√			Inspect cord for damage.	Broken or bare wires are broken.
6.	Universal Laser Transmitter (ULT)	√		√			Inspect for dirty or damaged lens.	Lens broken or cracked.
		√	√	√			Make sure boresight knobs are securely attached to shafts.	Knobs broken or missing.
		√		√			Inspect connector for dirty or bent pins.	Pins dirty, bent or missing.
7.	Optical Turret Positioning Device (OTPD)	√					Check for battery in unit.	Battery not present.
		√		√			Inspect for cracks in plastic lens.	Lens cracked.
8.	Power Controller	√		√			Inspect for damaged connector.	Broken connector. Bent or missing pins.
		√		√			Inspect for acid leaks.	Acid is present.
9.	Detector Belts	√		√			Wipe all detectors/connectors clean. Inspect harnesses for damage that would prevent normal operation.	Detectors broken or missing. Connector pins dirty, bent, or missing. Amplifier broken.
10.	TOW Simulator Tube	√		√			Inspect tube for obvious damage.	Tube is cracked or broken.
		√		√			Wipe electrical connector clean and inspect for damage.	Broken connector. Bent or missing pins.
11.	Cable and Connector Assemblies	√		√			Inspect for broken or bare wires.	Broken or bare wires are present.
		√		√			Inspect connectors for damage or broken pins.	Broken connectors. Bent or missing pins.

SECTION III. OPERATION UNDER USUAL CONDITIONS

2.3 ASSEMBLY AND PREPARATION FOR USE.

MILES 2000 equipment must be inspected and prepared as described in the following paragraphs prior to use.

NOTE

When applying fastener tape, always apply the "hook" type tape to the holding surface (the surface to which an item will be installed) and the "pile" type tape to the item being installed. For example, when installing the Control Unit (CU) in the M2/M3 Bradley, you would apply the hook tape to the area above the Weapons Control Box, and the loop tape to the CU. The CU pile tape can then be attached to the side wall hook tape, firmly securing the CU.

2.3.1 Individual Weapons System (IWS). The Individual Weapons System consists of the Torso Harness with IWS Console (DPCU) and the Helmet Harness.

2.3.1.1 Helmet Harness.

2.3.1.1.1 Helmet Harness Installation for CVC Helmet. (See Figure 2-10.)

a. Remove the Helmet Harness from the Transit Case and inspect the harness for damage.

b. The Helmet Harness consists of a wide elasticized band with detectors, an amplifier, and three (3) patches of fastener tape.

c. Replace and report damaged equipment as required.

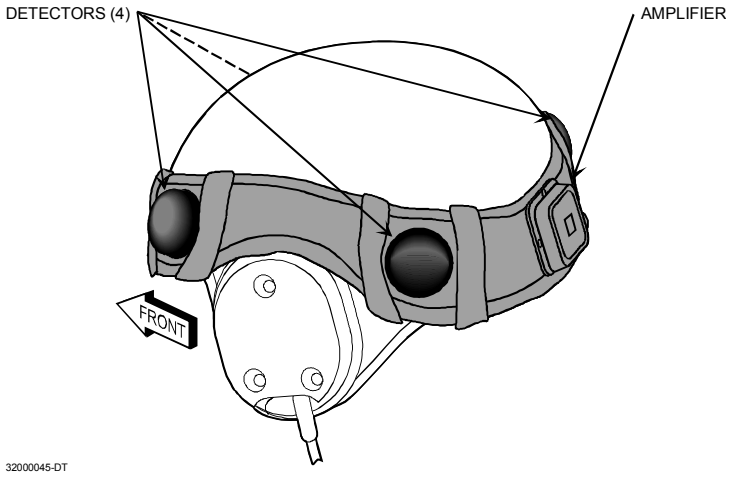


Figure 2-10. Helmet Harness (CVC Helmet).

d. Wipe all detectors clean. Slip the Helmet Harness over the helmet with the amplifier to the rear of the helmet. Smooth out any wrinkles or twists. Ensure the harness fits snugly just above the helmet brim.

e. Mark the helmet where the fastener tape patches touch the helmet. Remove the harness.

WARNING

Tape primer is toxic and highly flammable. Do not spray near heat, open flame, or sparks. Use primer only in well ventilated areas. Do not permit smoking in the area. Injury to personnel may result.

f. Spray tape primer over the marked areas where the fastener tape will be attached. Let primer dry thoroughly (follow directions on the primer can) before applying tape.

g. Cut three (3) strips of fastener tape approximately two (2) inches long. Remove the backing paper and press the tape patches firmly onto the helmet where the primer was applied.

h. Put the Helmet Harness around the helmet.

i. Adjust the harness so the three (3) patches of fastener tape line up with the three (3) pieces on the helmet (ensure that there are no wrinkles or twists in the harness). Press the tape on the harness firmly against the tape on the helmet.

2.3.1.2 Torso Harness. (See Figure 2-11.)

a. Remove the Torso Harness from the transit case and inspect for damage.

b. Replace and report damaged equipment as required.

c. Wipe all detectors and the IWS Console (DPCU) clean.

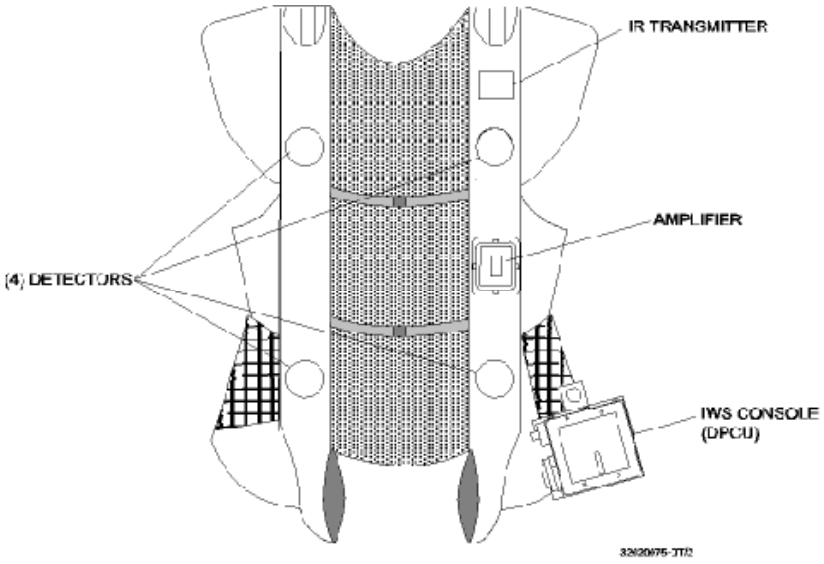


Figure 2-11. Torso Harness.

d. For PN 147421, put vest on and fasten two (2) vest clips. (See Figure 2-12A.)

e. For PN 147421, install the battery in the IWS Console (DPCU), loosen the thumbscrew and open the battery door. Install a 9-volt battery and secure the battery door using the thumbscrew.

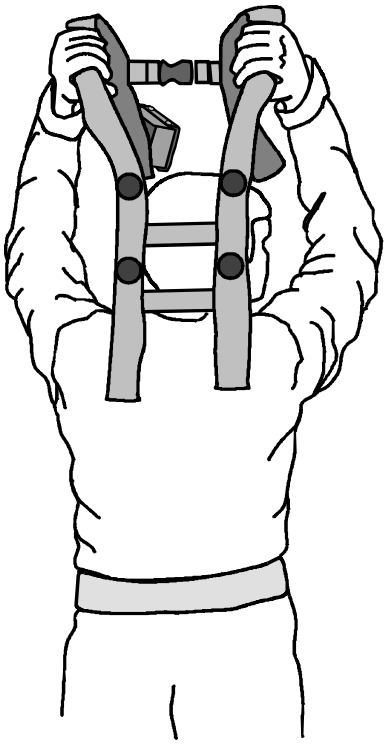
CAUTION

Ensure battery door is securely closed during storage and operations, or damage can occur to the battery door.

f. For PN 148245, as you raise the harness, make sure the IWS Console (DPCU) is in the front. Then lower it over your head and fasten the vest clip. (See Figure 2-12B.)

32000057-DT

PN 147421
A



32000058-DT

PN 148245
B

Figure 2-12. Torso Harness Installation.